

STATE WATER CONTROL BOARD ENFORCEMENT ACTION
SPECIAL ORDER BY CONSENT
ISSUED TO
BOSTON WATER & SEWER COMPANY
FOR THE
BOSTON WATER & SEWER SEWAGE TREATMENT PLANT
(VA0065358)

SECTION A: Purpose

This is a Consent Special Order issued under the authority of Va. Code §§ 62.1-44.15(8a and 8d) and 10.1-1185 between the State Water Control Board and Boston Water & Sewer Company, regarding the Boston Water & Sewer Sewage Treatment Plant, for the purpose of resolving certain violations of the State Water Control Law and Regulations.

SECTION B: Definitions:

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Va. Code" means the Code of Virginia (1950), as amended.
2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia and described in Va. Code §§ 62.1-44.7 and 10.1-1184.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality.

5. "Order" means this document, also known as a Consent Special Order.
6. "NVRO" means the Northern Virginia Regional Office of DEQ, located in Woodbridge, Virginia.
7. "BOD₅" means Biochemical Oxygen Demand.
8. "TSS" means Total Suspended Solids.
9. "WET" means Whole Effluent Toxicity.
10. "Permit" means Virginia Pollutant Discharge Elimination System (VPDES) Permit No. VA0065358.
11. "CCA" means Communications Corporation of America, a direct mail printing operation located in Boston, Virginia.
12. "DMR" means Discharge Monitoring Report.

SECTION C: Finding of Facts and Conclusions of Law

1. Boston Water & Sewer Company owns the Boston Water & Sewer sewage treatment plant (STP) which is located in Culpeper County and serves the Longlea Conference Center and CCA. The STP discharges wastewater into an unnamed tributary of the Hazel River in the Rappahannock River Basin. The discharges are the subject of the Permit, which was reissued on September 1, 2003 and expires on August 31, 2008.
2. The Board has evidence to indicate that Boston Water & Sewer may have: (1) violated VPDES Permit Regulation 9 VAC 25-31-50.A by exceeding permit effluent limits for ammonia in January, March, May and June 2003; for BOD₅ and TSS in January 2003; and for WET in October 2003; (2) violated 9 VAC 25-31-50.A by submitting invalid monitoring data for BOD₅ in February 2003; and (3) violated 9 VAC 25-31-50.A by failing to monitor pH at the required frequency in February 2003. DEQ issued four Warning Letters (WL) and a Notice of Violation (NOV) for the alleged violations as follows: WL No. W2003-03-N-1012 issued March 7, 2003; WL No. W2003-04-N-1031 issued April 11, 2003; WL No. W2003-05-N-1010 issued May 18, 2003; WL No. W2003-07-N-1010 issued July 16, 2003; and NOV No. W2003-08-N-0004 issued August 14, 2003.
3. During the period from January through July 2003, the biological treatment process at the STP was periodically impaired resulting in permit effluent limit exceedences for ammonia, BOD₅, and TSS. Boston Water & Sewer attributed the exceedences to two causes. First, the STP routinely

experiences extremely low loading which can adversely affect the performance of the biological treatment process. The facility reports average flows of 1,000 to 2,000 gallons per day but is designed to treat 15,000 gallons per day. To address this problem Boston Water & Sewer adds seed sludge from another plant and introduces feedstock augmentation when necessary to assure a healthy biomass. Secondly, Boston Water & Sewer evaluated the STP's treatment systems and identified elevated levels of zinc in the plant biomass and in the influent from the CCA printing facility. As a consequence Boston Water & Sewer concluded that toxicity from metals was likely impairing the STP's biological treatment. The STP achieved full permit compliance after several components of the CCA waste stream were isolated and removed.

4. Boston Water & Sewer failed to perform required daily monitoring for pH, dissolved oxygen, and total recoverable chlorine from February 16, 2003 through February 18, 2003 because heavy snowfall prevented personnel from reaching the STP. The facilities which the STP serves were closed during that period due to the snowfall. In addition Boston Water & Sewer missed another day of monitoring for pH on February 28, 2003 due to the lack of a functioning pH meter on site. The STP is now equipped with a back-up meter.
5. Boston Water & Sewer submitted an invalid value for its average and maximum BOD₅ concentration limits in February 2003. BOD₅ is required to be measured after a five-day incubation period. However, due to adverse weather conditions, the laboratory conducting the analysis didn't make the measurement until after an incubation period of approximately seven days. Correspondence from the laboratory that performs the analysis indicates that they are aware of the proper procedure for the test and the importance of submitting only valid data. The February DMR was resubmitted omitting the invalid data.
6. DEQ reissued Boston Water & Sewer's Permit effective September 1, 2003. The reissued Permit contained new WET limits which the STP exceeded in October 2003. Boston Water & Sewer believes that the exceedence was likely caused by excessive dechlorination tablet particles in the STP's effluent. Boston Water & Sewer is conducting tests to confirm this hypothesis and developing a plan to achieve compliance with the limit.
7. Boston Water & Sewer has submitted a plan, incorporated in this Order as Appendix A, to (1) prevent incompatible materials from entering the STP from the CCA facility by conducting regular monitoring of the STP's influent; (2) execute an agreement with CCA that requires that the printer will not discharge anything other than ordinary domestic sanitary wastewater to the STP; (3) monitor treatment plant influent to determine organic loading and provide that, based on influent loading, feedstock augmentation is implemented as needed; and (4) develop and implement a plan designed to identify the source of the October 2003 WET exceedence and achieve compliance.

SECTION D: Agreement and Order

Accordingly the State Water Control Board, by virtue of the authority granted it in Va. Code § 62.1-44.15(8a and 8d), orders Boston Water & Sewer and Boston Water & Sewer voluntarily agrees, to pay a civil charge of \$1,960 within 30 days of the effective date of the Order in settlement of the violations cited in this Order. Payment shall be made by check payable to the "Treasurer of Virginia", delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 10150
Richmond, Virginia 23240

Either on a transmittal letter or as a notation on the check, Boston Water & Sewer shall indicate that this payment is submitted pursuant to this Order and shall include the Federal Identification Number for Boston Water and Sewer.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of Boston Water & Sewer, for good cause shown by Boston Water & Sewer, or on its own motion after notice and opportunity to be heard.
2. This Order only addresses and resolves those violations specifically identified herein, including those matters addressed in the Warning Letters issued on March 7, 2003, April 11, 2003, May 18, 2003, and July 16, 2003, and the NOV issued on August 14, 2003, as listed above in Section C2. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.
3. For purposes of this Order and subsequent actions with respect to this Order, Boston Water & Sewer admits the jurisdictional allegations, and neither admits nor denies factual findings and conclusions of law contained herein.
4. Boston Water & Sewer consents to venue in the Circuit Court of the County of Culpeper for any civil action taken to enforce the terms of this Order.
5. Boston Water & Sewer declares it has received fair and due process under the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, and the State Water Control Law, and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and, for purposes of this Consent Order, to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any

administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.

6. Failure by Boston Water & Sewer to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Boston Water & Sewer shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Boston Water & Sewer shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Boston Water & Sewer shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order.

Such notice shall set forth:

- a. the reasons for the delay or noncompliance;
- b. the projected duration of any such delay or noncompliance;
- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance;
and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director within 7 days of learning of any condition above, which Boston Water & Sewer intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and Boston Water & Sewer. Notwithstanding the foregoing, Boston Water & Sewer agrees to be bound by any compliance date, which precedes the effective date of this Order.

11. This Order shall continue in effect until the Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to Boston Water & Sewer. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Boston Water & Sewer from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.
12. By its signature below, Boston Water & Sewer Company voluntarily agrees to the issuance of this Order.

And it is so ORDERED this day of _____, 2003.

Robert G. Burnley, Director
Department of Environmental Quality

Boston Water & Sewer Company voluntarily agrees to the issuance of this Order.

By: _____
Edward O'Brien, President
Boston Water & Sewer Company

Date: _____

Commonwealth of Virginia
City/County of _____

The foregoing document was signed and acknowledged before me this ____ day of _____, 2003, by Edward O'Brien, who is President of Boston Water & Sewer Company, on behalf

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of said company.

Notary Public

My commission expires: _____.

APPENDIX A SCHEDULE OF COMPLIANCE

1. By November 1, 2003 Boston Water & Sewer shall implement a wastewater monitoring program at the sewage pump station located at the CCA facility. Monitoring for the first month shall consist of weekly, 24-hour time proportioned composites, to be analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), zinc, copper, and surfactants (MBAS). Monitoring frequency shall be decreased to once per month sampling and analyses for subsequent months, provided all parameters meet the criteria of normal domestic sanitary wastewater. Normal domestic sanitary wastewater shall be defined as CCA wastewater BOD, zinc, copper, and MBAS concentrations that do not vary by more than 40% from baseline concentrations. The Company shall establish a baseline of such normal influent concentrations by taking the average of the first month's sampling data.

In the event that monitoring shows CCA wastewater contains materials other than normal domestic sanitary wastewater, Boston Water & Sewer shall require CCA to immediately remove such materials from its wastewater. If CCA fails to remove such materials and they result in or contribute to a violation of Boston Water & Sewer's VPDES permit, Boston Water & Sewer shall terminate the CCA discharge.

By February 27, 2004, Boston Water & Sewer will submit to DEQ NVRO an amended Operation and Maintenance Manual that incorporates the above referenced wastewater monitoring program.

2. Beginning in October 2003 Boston Water & Sewer shall monitor and analyze the wastewater treatment plant influent on a monthly basis, or more frequently as necessary, for BOD, with the results used to determine influent organic loadings. Influent organic loading shall be augmented as necessary using an additional food source to maintain minimum plant loading for effective biomass growth. Augmentation will generally be considered necessary when BOD mass influent loading is less than a loading represented by influent BOD 250 mg/l and influent flow 1000 gpd average. The determination to augment will also consider the plant balance among filamentous/non-filamentous organisms and other treatment biomass evaluations.

By February 27, 2004, Boston Water & Sewer will submit to DEQ NVRO an amended Operation and Maintenance Manual incorporating the influent monitoring and organic loading augmentation program.

3. By February 27, 2004 a letter of understanding shall be executed between Boston Water & Sewer and CCA providing that in the event of a discharge of wastewater from CCA other than normal domestic sanitary wastewater to the wastewater treatment facility, CCA shall take immediate steps to cease discharge of the incompatible material.

4. The Company is pursuing a whole effluent toxicity analysis program to test its hypothesis concerning the cause of the October, 2003 test exceedence. That program shall be completed and the results, including the Company's correction plan, forwarded to the Department by February 27, 2004 for review and approval. In the event of an exceedence of the VPDES permit limit for whole effluent toxicity in the first quarter of 2004, the Company shall submit to DEQ NVRO for approval within 30 days of the Discharge Monitoring Report including the toxicity result a further plan designed to identify the source of toxicity or to otherwise achieve compliance. The plans shall be implemented within 30 days of DEQ approval.